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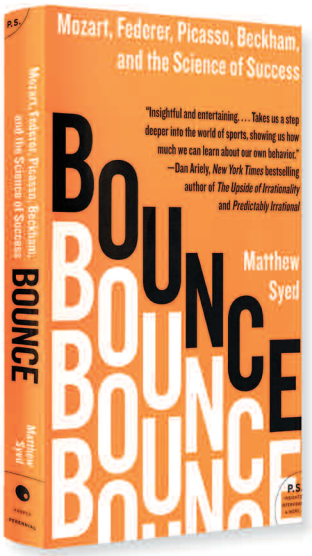
Bounce

Mozart, Federer, Picasso, Beckham and the Science of Success



by Matthew Syed

THE SUMMARY IN BRIEF

We love to win and hate to lose, whether it's on the playing field, in the office or in the classroom. In this bold new look at human behavior, award-winning journalist and Olympian Matthew Syed explores the truth about our competitive nature — why we win, why we don't and how we really play the game of life.

Syed reveals how, over time and with the right kind of practice, not only the body changes but also the brain. This levels the playing field, so to speak; all individuals can accumulate the knowledge that creates excellence, regardless of where they started from.

Bounce reveals how competition — the most vivid, primal and dramatic of human pursuits — provides vital insight into many of the most controversial issues of our time. From biology and economics to psychology and culture, from genetics and race to sports and politics, *Bounce* shows how competition provides a master key with which to unlock the mysteries of the world.

IN THIS SUMMARY, YOU WILL LEARN:

- Why talent is a myth.
- The steps you need to take on the path to excellence.
- The mindsets that lead to life-changing action.
- The psychology behind words and choking.
- The secret depression that accompanies winning.
- How knowledge shapes perception.

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THE COMPLETE SUMMARY: **BOUNCE**

by Matthew Syed

The author: Matthew Syed is a multi-award winning columnist for *The Times* of London. His numerous prizes include Sports Journalist of the Year at the British Press Awards.

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For additional information on the author, go to www.summary.com.

PART I: THE TALENT MYTH

In January 1995, I became the British number-one table tennis player for the first time, which is a heck of an achievement. At 24 years of age, I suddenly found myself on the receiving end of regular invitations to speak to school audiences about my rise to international glory, and would often take my medals along to dazzle the youngsters.

What made me special? What marked me out for sporting greatness? I came up with a number of attributes: speed, guile, gutsiness, mental strength, adaptability, agility, reflexes. Despite being born into an ordinary family, I triumphed against the odds and now had a personal odyssey of success.

This is the typical way that many who have reached the top in sport, or any other field, choose to tell their story. Our culture encourages this soaring individualism and Hollywood is full of such narratives, often sugar-coated in American Dream sentimentality. But while these stories are inspirational and entertaining, are they true?

This is my story in table tennis, retold with the bits I chose to ignore the first time, as they diminished the romance and individuality of my triumph.

The Hidden Logic of Success

In 1978, my parents bought a table tennis table and put it in our large garage. Not many youngsters of my age in my hometown possessed a full-size, tournament-specification table. This was my first bit of good fortune.

My second piece of good fortune was having an older brother who came to love table tennis as much as I. We would play for hours in the garage after school: without knowing it, we were blissfully accumulating thousands of hours of practice.

The third was Peter Charters, a teacher at the local primary school. Mr. Charters cared about one thing above all: table tennis. He was the coach on almost all of the after-school sporting clubs, but these were just a front. He was the nation's top coach and a senior figure in the English Table Tennis Association and he scouted sporting talent wherever it emerged so he could focus it on table tennis. Charters invited my brother and I to join Omega in 1980, at the very moment we were outgrowing the garage.

Omega was a one-table hut in a gravel enclosure a couple of miles from where we lived in suburban Reading. It was not a luxurious club, but it had one advantage that made it almost unique anywhere in the country: it was open 24 hours a day for the exclusive use of its tiny group of members, each of whom had a set of keys. My brother and I took full advantage, training after school, before school, on weekends and during the holidays.

My parents describe my success in table tennis as an inspirational triumph against the odds. But what about the others who had all the advantages but didn't make it?

Practically every man or woman who triumphs against the odds is, on closer inspection, a beneficiary of unusual circumstances. The delusion lies in focusing on the individuality of their triumph without perceiving — or bothering to look for — the powerful opportunities stacked in their favor.

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What is Talent?

In 1991, Anders Ericsson, a psychologist at Florida State University, and two colleagues conducted an extensive investigation into the causes of outstanding performance. Their subjects — violinists at the renowned Music Academy of West Berlin in Germany — were divided into three groups.

The first group comprised the outstanding students: the kids who would normally be described as super talented, the ones supposedly lucky enough to have been born with special musical genes. The second group was extremely good, but not as accomplished as the top performers. The third group were the least able, most studying to become music teachers, a course with far less stringent admission standards.

The difference revealed between the groups at the end of the investigation was dramatic and unexpected; indeed, it was so stark that it almost jumped out at Ericsson and his colleagues — the number of hours devoted to serious practice. By the age of 20, the best violinists had practiced an average of 10,000 hours, more than 2,000 hours more than the good violinists and more than 6,000 hours more than the violinists hoping to become music teachers. These differences are extraordinary. Top performers had devoted thousands of additional hours to becoming master performers.

Ericsson also found that there were no exceptions to this pattern: nobody reached the elite group without copious practice and nobody who worked their socks off failed to excel. Purposeful practice was the only factor distinguishing the best from the rest.

So the question is: How long do you need to practice in order to achieve excellence? Extensive research has come up with a very specific answer to that question: from art to science and from board games to tennis, it has been found that a minimum of 10 years is required to reach world-class status in any complex task.

This is what Ericsson calls the iceberg illusion. When we witness extraordinary feats of sport or artistic prowess, we are witnessing the end product of a process measured in years. What is invisible to us — the submerged evidence — is the countless hours of practice that went into the virtuoso performance. The drills, the mastery of technique and form, and the solitary concentration have altered the anatomical and neurological structures of the master performer.

Knowledge is Power

Think about firefighters. Many young men are drawn to the profession because they think they're good at making decisions under pressure, but quickly discover they just can't cut it. When they look at a raging fire, they are drawn to the color and height of the flames and other perceptually salient features. Only after a decade or more of on-the-job training can they place what they are seeing within the context of an interwoven understanding of the patterns of fires.

It is the rapid escalation in the number of variables in many real-life situations — including sports — that makes it impossible to sift the evidence before making a decision: it would take too long. Good decision making is about compressing the informational load by decoding the meaning of patterns derived from experience. This cannot be taught in a classroom; it is not something you are born with; it must be lived and learned. To put it another way, knowledge emerges through practice.

The Path to Excellence

"When most people practice, they focus on the things they can do effortlessly," Ericsson has said. "Expert practice is different. It entails considerable, specific and sustained efforts to do something you can't do well — or even at all. Research across domains shows that it is only by working at what you can't do that you turn into the expert you want to become."

There is an even more vital facet of expertise, the *quality* of practice: the specialized learning used by top performers to attain master status and the deep concentration that is needed during each of those 10,000 hours to make them count.

Ericsson calls it "deliberate practice," to distinguish is from what most of the rest of us get up to. I am going to call it *purposeful* practice, because the practice sessions of aspiring champions have a specific and never-changing purpose: progress. Every second of every minute, the goal is to extend one's mind and body, to push oneself beyond the outer limits of one's capacities, to engage so deeply in the task that one leaves the training session, literally, a changed person.

Purposeful practice is about striving for what is just out of reach and not quite making it; it is about grappling with tasks beyond current limitations and falling short again and again. Excellence is about stepping outside the comfort zone, training with a spirit of endeavor, and accepting the inevitability of trials and tribulations. Progress is built upon the foundation of necessary failure. That is the essential paradox of expert performance.

Careful study has shown that creative innovation follows a very precise pattern: like excellence itself, it emerges from the rigors of purposeful practice. To put it

another way, eureka moments are not lightning bolts from the blue, but tidal waves that erupt following deep immersion in an area of expertise.

Take Pablo Picasso, an artist who is often held up as a perfect example of the lightning bolt theory of creativity. How else to explain how a man born in relative anonymity in the Spanish region of Andalusia came to produce some of the most innovative and influential artistic works of the 20th century?

Robert Weisberg, a psychologist at Temple University, discovered that the young Picasso spent his early years painstakingly drawing eyes and the human body in difficult poses: not just a few hours or weeks, but countless hours studiously learning his craft.

But Picasso's creative genius was not at all evident in his early career. His early paintings were of no greater merit than those of his peers. Yet these "failures" were not in conflict with his later genius; they were part and parcel of it. Precisely the same story reveals itself when looking at Wolfgang Amadeus Mozart, whose early works were imitative and whose masterpieces emerged only after 18 years of practice.

Mysterious Sparks and Life-Changing Mind-Sets

Shaquille O'Neal was 17 years old when he heard the words that would change his life. He had just spent his summer at basketball camp, and for the first time had begun to doubt whether he had what it takes to become an NBA player.

When he got home, he told his mother that he was having doubts about his future in the sport. She responded by encouraging him to try harder, to which O'Neal responded, "I can't do that right now. Maybe later." Then his mother said the words that would change everything: "Later doesn't always come to everybody."

"Those words snapped me into reality and gave me a plan," O'Neal told Marlo Thomas for her book *The Right Words at the Right Time*. "You work hard now. You don't wait. If you work hard enough, you'll be given what you deserve. Everything got easier for me after that."

Have you ever experienced a transformational moment — what psychologist Michael Rousell calls a spontaneous influence event? A key factor driving success and failure is to be found within the realm of motivation. Sure, clocking up thousands of hours of purposeful practice ultimately determines how far we make it along the path to excellence, but it is only those who care about the destination, whose motivation is "internalized," who are ever going to get there.

Motivational Jolts

Motivation by association is a small, barely noticed connection searing deep into the subconscious and sparking a motivational response. It can be a shared birthday triggering a jolt of similarity with someone who is a high achiever in something. It could be sparked by a person winning a sporting event for their country.

If we widen the perspective, we will see that this pattern reveals itself time and time again. In 1962 Hans Alser won the European Championship in table tennis for Sweden. It was, at the time, an unforeseen triumph that mesmerized a nation. Nine years later Stellan Bengtsson, who had marveled at Alser's success as a youngster, won the World Championships, ushering in two decades of Swedish success at the very highest levels of the game.

The Talent Myth Revisited

The talent myth, as we have seen, is built on the idea that innate ability, rather than practice, is what ultimate-

More Perks of Expert Practice

Purposeful Practice has other benefits as well.

Brain Transformation: The body and mind can be radically altered with the right kind of practice. "When the human body is put under exceptional strain, a range of dormant genes in the DNA are expressed and extraordinary physiological processes are activated," Anders Ericsson wrote.

The Structure of Innovation: Careful study has shown that creative innovation follows a very precise pattern: like excellence itself, it emerges from the rigors of purposeful practice. Eureka moments are not lightning bolts from the blue, but tidal waves that erupt following deep immersion in an area of expertise.

Feedback Loops: With many activities, like steering a car, feedback is integral to the activity, but there are dozens of other areas — including sports and many jobs — where feedback must be actively sought. We need to know where we are going wrong if we are going to improve. Great coaches are able to design practice so that feedback is embedded in the drill, leading to automatic readjustment, which, in turn, improves the quality of feedback, generating further improvements and so on. If you can position yourself in this kind of feedback loop, improvements will escalate in ways that will astonish you.

ly determines whether we have it within us to achieve excellence. We have also seen that this is a rather corrosive idea. Why spend time and energy seeking to improve if success is available only to people with the right genes? But just how corrosive is this myth? In 1978 Carol Dweck, a professor at Stanford University and one of the most influential psychologists of modern times, asked that question.

Dweck's experiment was simple. She took 330 fifth- and sixth-graders and gave them a questionnaire to probe their beliefs about talent and, in particular, intelligence. Those students who held the belief that intelligence is set in genetic stone — i.e. the talent myth — had what Dweck would later call a fixed mind-set. Those who believed that intelligence can be transformed through effort had a growth mind-set. As the children toiled, two dramatically different patterns emerged.

Those in the fixed mind-set had a belief the test was measuring how intelligent they were now and also how intelligent they would be in the future. Their belief was that intelligence is fixed by innate talent. When they started the difficult problems, they lost faith in their intellect and their strategies deteriorated. The students in the growth mind-set, however, did not blame anything or even consider themselves to be failing. A full quarter of them actually improved.

Is it any wonder that a fixed mind-set interprets failure as calamitous; that it saps creativity and undermines future performance; that anything will be done to avoid challenges, even when challenges might be useful?

Think of life as having two paths: one leading to mediocrity, the other to excellence. The path to mediocrity is flat and straight. It's possible to cruise along on autopilot with a nice, smooth, steady, almost effortless progression. You can reach the destination without stumbling and falling over, whether you have a fixed or a growth mind-set.

The path to excellence, however, is very different. It is steep, grueling and arduous. It is lengthy, requiring a minimum of 10,000 hours of lung-busting effort to get to the summit. And, most important of all, it forces voyagers to stumble and fall on every single stretch of the journey — because this is the defining feature of purposeful practice, without which excellence is unattainable.

The implication hardly needs spelling out. A growth mind-set is perfectly suited to the achievement of excellence; a fixed mind-set, to the achievement of mediocrity. If your chosen destination is within the domain of excellence, you'd better have a growth mind-set. Why? Because a spark ignited in a fixed mind is likely to be extinguished at the first sign of failure.

The Power of Words

In 1998, Dweck performed another experiment. The students were given a series of tests starting with simple puzzles. Afterwards they were given their scores along with something else: six words of praise. Half the students were praised for intelligence: "You must be smart at this!" the other half were praised for effort: "You must have worked really hard!" Dweck wanted to test whether simple words with subtle differences would have a measurable impact on persistence and performance; whether they could mold the student's attitudes to success and failure.

Throughout the series of tests that followed, the student's choices and test scores were recorded. The results were remarkable.

The way the two groups responded to failure was dramatically different. The group praised for intelligence interpreted failures as proof they were no good at the task at all. The group praised for effort persevered on the test far longer, enjoyed it far more and did not suffer any loss in confidence.

When the experiment came full circle, the group praised for intelligence showed a 20 percent decline in performance, but those in the effort-praised group increased their scores by 30 percent — failure actually spurred them on.

These examples, taken from Dweck's book *Mindset*, hint at a radical new approach to the way we interact with students, aspiring sports stars or, indeed, anyone. That we should praise effort, not talent; that we should emphasize how abilities can be transformed through application; that we should interpret failure not as an indictment, but as an opportunity. ●

PART II: PARADOXES OF THE MIND

Excellence is not, on its own, sufficient for success. It is also necessary to translate one's abilities into peak performance. We know it when we see it: We see it in Tiger Woods sinking a 12-foot putt to win the U.S. Masters without flinching; we see it in David Beckham bending the ball around a wall from thirty yards to save a match for the England soccer team.

How do they do it? Where does the mental assurance come from? Can it be learned?

In early 1944, Allied forces launched an offensive foray at Anzio in northern Italy during World War II. It turned out to be a disastrous maneuver, with American forces trapped in the caves of Pozzoli for more than a

week. Henry Beecher, a young doctor from Harvard, was the man responsible for treating the influx of injured American soldiers at a makeshift field hospital at the beachhead.

Such was the scale of casualties that Beecher soon ran out of anesthetic. Confronted with a soldier with gaping wounds and needing to operate quickly, he therefore instructed his nurse to administer a saltwater injection instead of morphine. The patient, assuming that a proper dose of anesthesia had been administered, lay back in preparation for his operation. What happened next would come to shake the medical world.

Beecher found that the soldier was not merely comforted by the injection of salt water; he was able to tolerate the agonies of surgery as well as if he had been injected with "real" anesthetic. Over the next few weeks Beecher was to replicate the result with dozens of wounded soldiers, each of whom could bear, with seemingly miraculous stoicism, the trauma of surgery with nothing more than salt water running through their veins. When he returned, Beecher wrote a paper called, "The Power of Placebo."

The key point in all this is that the power of the mind is exercised through the medium of belief, and it doesn't matter whether the belief is true or false or how the delusion is treated, so long as it is created successfully. It does not matter if it is supported by fabricated evidence or no evidence at all. All that matters is that the patient believes.

The Placebo Effect in Sports

Listen to a top athlete talking in the moments before he is about to play a big match, and you will hear statements bordering on nonsense. After more than 30 years of sports psychology, we have gotten used to this psychobabble, so we are, to a large extent, deaf to its specific kind of incoherence.

Norman Vincent Peale makes this point in *The Power of Positive Thinking*: "I am now convinced that if you expect the best, you are given some strange kind of power to create the conditions that produce the desired results." Anne Harrington of Harvard University makes the same point: "There is an innate capacity for our bodies to bring into being, to the best of their ability, the optimistic scenarios in which we fervently believe."

This is what we might dub the "performance placebo," but the trick of sports psychology has been to divorce it from religion; to ground optimism not in the interventionism of the Almighty, but in an exaggerated belief in the efficacy of the self; to remove uncertainty by building conviction in one's capacity to achieve.

George Orwell, *1984* and Doublethink

Anyone who has read George Orwell's *1984* will find the idea of doublethink curiously familiar. In it, Orwell introduces the term and describes it as follows:

"Doublethink means the power of holding two contradictory beliefs in one's mind simultaneously, and accepting both of them… To forget any fact that has become inconvenient, and then, when it becomes necessary again, to draw it back from oblivion for just so long as is needed…. All this is indispensably necessary."

At the time of publication of *1984*, many critics argued that doublethink was psychologically implausible, but it is, in fact, commonplace. Doublethink is essential to the success of leading athletes and other top performers.

That is why athletes refuse to entertain the possibility of defeat — they are aware that doubt is as dangerous a thing when entering the field of play as it is when swallowing a sugar pill.

Irrational Optimism

The great irony of performance psychology is that it teaches each sportsman to believe, as far as he is able, that he will win. No man doubts. No man indulges his inner skepticism. That is the logic of sports psychology. Doubt to an athlete is poison. Progress is made by ignoring the evidence; it is about creating a mind-set that is immune to doubt and uncertainty.

As Arsene Wenger, one of the most successful soccer club managers of recent times puts it: "To perform to your maximum, you have to teach yourself to believe with an intensity that goes way beyond logical justification. No top performer has lacked this capacity for irrational optimism; no sportsman has played to his potential without the ability to remove doubt from his mind."

You may have heard the expression — "taking the positives" — from top sportsmen and sportswomen. It is a psychological technique so universal that is has become part of the lexicon. What does it mean? It is about ignoring aspects of a performance that contradict one's prior optimism while focusing on the good tactics, the winning shots, etc., that support it.

To put it another way, top athletes have learned to filter out unwanted evidence in order to sustain an exaggerated belief in their own abilities. ●

The Curse of Choking and How to Avoid It

Many hours of practice enables athletes and other performers to encode the necessary movements in implicit, rather than explicit, memory. Consciously monitoring the movements painstakingly builds up the neural framework to support good execution. Only after many hours can the execution be done without having to think about it.

This migration from explicit to implicit system of the brain has two crucial advantages. First it enables the expert player to integrate the various parts of a complex skill into one fluent whole, something that would be impossible at a conscious level because there are too many interconnecting variables for the conscious mind to handle. And second, it frees up attention to focus on higher-level aspects of the skill, such as tactics and strategy.

Imagine if an expert were to suddenly find himself using the "wrong" brain system. It wouldn't matter if her were the greatest player of all time or merely a decent club player because he would now be at the mercy of the explicit, rather than the implicit, system. The highly sophisticated skills encoded in the implicit part of his brain would count for nothing. He would find himself striving for victory using neural pathways he last used as a novice.

This happens because directing attention to the mechanics of the shot is likely to be catastrophic because there are too many interconnecting variables for the conscious mind to handle. The problem is not a lack of focus, but too much focus. Conscious monitoring disrupts the smooth workings of the implicit system. The sequencing and timing of the different motor responses are fragmented, just as they would be with a novice. The expert is, effectively, a beginner again.

So, how to overcome choking? Considering that choking only ever occurs in highly pressurized circumstances, what better way than to convince oneself that a career-defining moment doesn't really matter? After all, if the performer does not feel any pressure, there is no pressure, and the conscious mind will not attempt to wrestle control from the implicit system.

Mark Bawden, a sports psychologist who worked with Sarah Lindsay at the Olympics in Salt Lake City, puts it like this: "In order to make all the sacrifices necessary to reach world-class levels of performance, an athlete has to believe that performing well means everything. But that is precisely the belief that is most likely to trigger choking. The key psychological skill for someone with a tendency to choke is to ditch that belief in the minutes before competition and to replace it with the belief that the race does not really matter. It is a form of psychological manipulation, and it takes a lot of work to master." ●

Baseball Rituals, Pigeons and Why Great Sportsmen Feel Miserable After Winning

Tennis players are a strange bunch. Have you noticed how they always ask for three balls instead of two; how they keep using the towel between points, not to remove sweat, but to erase the demons from their mind? It sometimes seems as if Wimbledon is less a tennis competition than a giant obsessive compulsive disorder (OCD) convention.

But for sheer variety of superstitions, there is nothing to match baseball, a sport in which it sometimes seems as if a bizarre ritual is a condition of entry into the major leagues. Pitcher Greg Swindell would bite the tip off one of his fingernails before each start and hold it in his mouth for the entire game.

Do these superstitions work? If not, why are they clung to so fiercely? And what does all this tell us about ritual and rationality in the wider world?

The answer is to be found in the world of pigeons. This may sound a little strange, but it was the firm opinion of B.F. Skinner, the man widely regarded as the father of modern psychology.

Skinner's view was based on a groundbreaking experiment in 1947 in which he placed some hungry pigeons in a cage attached to an automatic mechanism that delivered food "at regular intervals with no reference whatsoever to the bird's behavior." He discovered that the pigeons associated the delivery of the food with whatever chance actions they happened to be performing at the moment it was first delivered. So what did the pigeons do? They kept performing the same actions, even though these had no effect whatsoever on the release of food.

The fact that pigeons and human beings share superstitious tendencies suggests that this kind of behavior emerged quite early in evolutionary history. What is certain is that it is widespread, particularly within Homo sapiens. In a recent poll, more than half of Americans admitted to being superstitious.

Of course, some rituals may have a genuine impact on performance. The very fact they have become part of a well-established routine may help an athlete to relax and

feel comfortable, aiding clear thinking and reducing anxiety. Rituals may also exert a placebo effect; as we saw earlier, believing strongly that something works can, in circumstances where the outcome is under personal control, make it more likely that it will actually work.

It is only when a superstition compromises our deeper aspirations that we have moved along the spectrum of irrationality far enough to risk a diagnosis of OCD. When a superstition that is supposed to help you actually harms you, it is probably time to kick out the ritual. Using a rabbit's foot, obviously.

The Aftermath of Winning

Have you ever nurtured an ambition so precious that it became like a dear friend? But when you attain it, it vanishes in a detonation of euphoria? As Robert Louis Stevenson, a man who knew a thing or two about the ironies of the human psyche, wrote: "To travel hopefully is a better thing than to arrive."

Seen in an evolutionary context, so-called negative emotions — like the sense of loss after a great win — start to look different: anxiety facilitates escape from dangerous situations and helps us avoid them in the future; mild depression enables us to disengage from unattainable goals.

From this vantage point, anticlimax makes perfect sense. Millions of years of natural selection have sifted sequences of DNA just so we can feel miserable in the aftermath of long-coveted triumph. Why? So that we are able to disengage from our triumph, enabling us to focus on the next challenge. If goal fulfillment induced indefinite periods of contentment, we would be robbed of all future motivation.

For a triumphant athlete, anticlimax is the emotional lull that lays the psychological foundations for the next tilt at golf. For an award-winning writer, it is the melancholy that provides the creative impetus for the next literary adventure. For a lottery winner, it is the sense of hollowness that makes her want to go out to work again. ●

PART III: DEEP REFLECTIONS

Why is it that top athletes seem to perceive faster, smarter and deeper than the rest of us?

A key difference between experts and novices is that experts are better at extracting information from what is going on around them. Roger Federer, 16-time Grand Slam champion, for example, can anticipate the movement of a tennis ball more efficiently than the rest of us, not because he has better eyesight, but because he knows where to look and how to interpret the movement patterns of his opponent.

When Federer plays tennis, he does not make better inferences from a universally accessible pool of sensory information; rather he sees and hears the world in an entirely different way.

Similarly, expert firefighters are able to figure out how to combat a raging blaze because they have learned to grasp subtle visual cues revealing their dynamics.

These insights help unlock some of the deepest mysteries of sport. It is as if top athletes are wearing X-ray goggles, providing perceptual access to a realm of spins, shapes, curves and patterns denied to the rest of us.

The key point in all this is that knowledge is not used merely to make sense of perceptions; knowledge is embedded in perception. As the great British philosopher Sir Peter Strawson put it, "Perception is thoroughly permeated by our concepts."

Inattentional Blindness

Attention is a resource with severe capacity limitations. As we make our way through the world (or take part in a sports contest), we are bombarded by so much sensory information that it is impossible to process it all consciously. Attention acts as kind of a filter system that permits only a certain amount of information to hit conscious awareness. But if attention is at overload, we are unable to perceive things that are actually there, right in front of our noses.

Top athletes use inattentional blindness to see where the ball is going before their opponent actually hits it; they have delegated the inference to the higher areas of the brain. Delegating the stroke to the brain's implicit system means that they have plenty of available attention with which to think strategically and to deal with looming emergencies, such as a sudden switch in tactics from their opponent. It is often the difference between success and failure. ●

RECOMMENDED READING LIST

If you liked *Bounce*, you'll also like:

1. ***Talent is Overrated* by Geoff Colvin.** What's the real solution to the mystery of high performance? Learn about the highly specific kind of effort that Colvin calls "deliberate practice."
2. ***You Already Know How to Be Great* by Alan Fine.** Fine, an accomplished tennis, golf and executive coach, reveals the G.R.O.W. (Goal, Reality, Options, Way Forward) method to increased performance.
3. ***Clutch* by Paul Sullivan.** Do you choke under pressure or are you "clutch"? Featuring examples from a variety of fields, you will learn how to successfully perform under extraordinary pressure.